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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,234	10/19/2001	Daigo Kaneko	381NP/50449	7613

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EXAMINER	
FLETCHER, MARLON T	
ART UNIT	**PAPER NUMBER**
2837	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/982,234	KANEKO ET AL.	
	Examiner	Art Unit	
	Marlon T. Fletcher	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-13 and 15-22* is/are rejected.

7)☒ Claim(s) *3 and 14* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4-13, and 15-22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto et al. (6,396,229) in view of Sugiura et al. (4,922,175) and Lee (6,283,252).

As recited in claims 1, 8, 11, 17, and 18, Sakamoto et al. disclose a method of controlling and controller driven by a synchronous motor comprising: a rotor position estimator which estimates a magnetic pole position of a rotor (column 6, lines 51-54) of said synchronous motor based on electrical quantities in relation to electric power supplied to the synchronous motor as discussed in column 16, lines 11-61.

As recited in claims 2 and 11, Sakamoto et al. disclose a controller, further comprising motor speed control (62) which controls the speed of said synchronous motor based on the position command as discussed in column 18, line 55 through column 19, line 13, wherein speed control is provided. Sakamoto et al. disclose a controller, further comprising a motor speed command generator which controls the speed of said synchronous motor based on the position command as discussed in the abstract and column 16, lines 49-61.

As recited in claims 4, 9, and 12, Sakamoto et al. disclose a controller, further

comprising position information correcting means (7) which corrects the position of the rotor which in turn controls the load based absolute position information of the load as discussed column 20, lines 5-32.

Although it may be inherent that the motor would control some Load, Sakamoto et al. do not disclose controlling a mobile body via a mobile body position estimator.

However, as recited in claim 1, Sugiura et al. disclose a mobile body position estimator which estimates the position of a mobile body based on the magnetic pole position estimated by said rotor position estimator as discussed in column 4, Lines 2-13; and column 5, lines. 48-61. As recited in claims 5-7, 9, 10, 12, 13, 15, and .16, Sugiura et al. disclose a method of controlling a mobile body, comprising the further step of: correcting the position of said mobile body estimated, based on absolute position information of said mobile body estimated by said mobile body position estimator based on absolute position information of said mobile body as discussed in column 6, Lines 41-51 ; wherein the mobile body position corresponds directly to the rotor position column 5, lines 53-61, wherein inherently, the position of said mobile body is changed corresponding to a distance that said mobile body travels due to the revolution of said motor.

With respect to claims 19-22, Lee discloses a mobile body position estimator which estimates the position of a mobile body based on the magnetic pole position estimated by said rotor position estimator as discussed in the abstract; and column 1, Lines 6-14 and correcting the position of said mobile body estimated (column 1, lines 6-14), wherein Lee discloses that the mobile body is @n elevator, wherein position is

generated about the mobile body (abstract), wherein inherently, the position of said mobile body is changed corresponding to a distance that said mobile body travels due to the revolution of said motor (figure 6 –mobile body 610).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Sugiura et al. and Lee with Sakamoto et al., because Sugiura et al. and Lee provide a control system, wherein the Load being controlled is a mobile body (elevator), wherein it could be understood that Sakamoto et al. provide subject matter for controlling a Load, wherein the combination provides teaching which would provide on skilled in the art to estimate the mobile body position driven by a synchronous motor (Sakamoto et al) based on the magnetic pole position.

Allowable Subject Matter

3. Claims 3 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments filed 12/05/2005 have been fully considered but they are not persuasive. The applicant argues that the references fail to teach the claimed invention. The claims have been amended to include the language "said position of said mobile body being changed corresponding to a distance that said mobile body travels due to the revolution of said motor." This language is inherent. It is clear that

the position of the load corresponds to the motor revolutions. So any movement of the body would change the distance of the body relative to the previous position. The applicant argues that Sugiura does not disclose or suggest obtaining the position of the mobile body corresponding to the moving distance (displacement) of the mobile body. The claims do not recite obtaining the position of the mobile body corresponding to displacement. It merely states "said position of said mobile body being changed corresponding to a distance that said mobile body travels due to the revolution of said motor." No data is obtained. Even if was obtained, the information would be lacking utility (35 USC 101) if there is no recitation of using the obtained data. The amendment did not add any substantial change to the claim. The claims remain rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T. Fletcher whose telephone number is 571-272-2063. The examiner can normally be reached on M-w, F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MTF
06/20/2006

MARLON T. FLETCHER
PRIMARY EXAMINER